THE WEATHER OF THE MONTH.

By Mr. WM. B. STOCKMAN, Chief, Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart VIII and the average values and departures from normal are shown in Tables I and V.

The mean pressure for the month was highest over the Middle Atlantic States, upper Ohio Valley, eastern Tennessee, and the northern portion of the South Atlantic States, and lowest over southwestern Arizona.

The mean pressure was above the normal in New England, eastern New York, New Jersey, the extreme southeastern and southwestern portions of Virginia, extreme northeastern and western North Carolina, eastern Tennessee, the northern portions of Georgia and Alabama, the southern and middle slope and Plateau and the southern portion of the northern slope regions, and the Pacific districts; elsewhere it was below the normal.

As a rule, the changes were slight. The greatest positive departures, ranging from +0.05 to +0.08 inch, occurred on the northwestern coast of California and the coast of Washington, and the greatest negative departures, ranging from —0.05 to —0.06 inch, in the central Missouri Valley, northern North Dakota, and northeastern Montana.

The mean pressure for the month increased over that of July, 1905, in the Pacific, Plateau, and western portion of the southern slope regions, and over the region from Arkansas, Missouri, and the central portions of Iowa and Minnesota eastward to the Atlantic Ocean; elsewhere it decreased from that of the preceding month.

The greatest increase in mean pressure, ranging from +0.05 to +0.06 inch, occurred in and about the Lake region, and the greatest decrease in western North Dakota and eastern Montana, where it ranged from —0.05 to —0.08 inch.

TEMPERATURE OF THE AIR.

The mean temperature for the month was below the normal in the upper Ohio Valley, eastern portion of the east Gulf States, the Atlantic States, except northeastern North Carolina, and the east-central coast of Florida, western Oregon, and the southwestern and west-central portions of California; elsewhere it was above the normal.

The negative departures were slight, and in but a few instances were greater than —1.0°, whereas the positive departures ranged from +2.0 to +5.7 in the greater portion of the region from the slope to the upper Lakes.

By geographical districts, the mean temperature for the month was below the normal in the Atlantic and Pacific districts and above normal in the remaining sections.

Maximum temperatures of 90°, or higher, were reported from all districts, except portions of New England, New York, Pennsylvania, northeastern lower Lake region, northern upper Lake region, the mountain districts of Maryland, the Virginias, and North Carolina, and scattered sections of south-central Montana, western Wyoming, central Colorado, northern New Mexico, extreme southwestern California, and along the coasts of Oregon and Washington; of 100°, or higher, in portions of South Carolina, northeastern Georgia, and eastern Arkansas, Texas, and Kansas generally, the western portion of Oklahoma and Indian Territories, the eastern portions of Colorado and New Mexico, southern and western Arizona, California, except on the immediate coast and in the east-central portion, eastern Oregon generally, southeastern Washington, western Idaho, eastern Montana, southwestern North Dakota, central and western South Dakota generally, north-central and extreme western Nebraska, and east-central Wyoming; and of 110°, or higher, in southern and western Arizona and southeastern and portions of central and north-central California.

Freezing temperatures were reported from portions of the Rocky and Sierra Nevada Mountains.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	8	65.2	— 1.4	—11.3	—1.4
Middle Atlantic	12	71.9	— 0.8	— 7.4	—0.9
South Atlantic	10	77.3	— 0.6	— 5.2	—0.6
Florida Peninsula*	8	81.0	— 0.4	+ 2.3	+0.3
East Gulf	9	79.8	+ 0.3	— 8.1	—1.0
West Gulf	7	82.4	+ 1.8	— 7.8	—1.0
Ohio Valley and Tennessee	11	74.9	+ 0.4	— 9.2	—1.2
Lower Lake	8	69.7	+ 0.2	—11.0	—1.4
Upper Lake	10	67.7	+ 1.8	— 6.9	—0.9
North Dakota*	8	68.1	+ 2.0	+ 1.3	+0.2
Upper Mississippi Valley	11	74.2	+ 1.7	— 8.7	—1.1
Missouri Valley	11	75.7	+ 2.7	— 6.5	—0.8
Northern Slope	7	70.2	+ 2.3	— 1.4	—0.2
Middle Slope	6	77.4	+ 2.8	— 7.1	—0.9
Southern Slope*	6	80.5	+ 2.2	—12.1	—1.5
Southern Plateau*	13	78.5	+ 0.7	— 4.3	—0.5
Middle Plateau*	8	70.7	+ 1.0	+ 4.6	+0.6
Northern Plateau*	12	69.1	+ 1.3	+11.2	+1.4
North Pacific	7	60.9	— 0.5	+ 9.3	+1.2
Middle Pacific	5	66.9	— 0.2	+ 7.3	+0.9
South Pacific	4	70.4	— 1.0	+ 6.3	+0.8

* Regular Weather Bureau and selected cooperative stations.

In Canada.—Prof. R. F. Stupart says:

The temperature was above the average from Alberta eastward to an imaginary line drawn northward and southward from the western portion of Lake Ontario, and below the average over British Columbia and from eastern Ontario to the Maritime Provinces, if we except one or two isolated localities in the latter Provinces, where a slight excess was experienced. The most positive departures occurred in parts of Alberta, Saskatchewan, and Manitoba, where they were from 3° to 4°, and the chief negative departure was reported from British Columbia, in Cariboo, and amounted to 5°.

PRECIPITATION.

The distribution of total monthly precipitation is shown on Chart III.

Average precipitation and departure from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
		Inches.		*Inches.*	*Inches.*
New England	8	3.94	103	+0.1	—4.3
Middle Atlantic	12	6.10	133	+1.5	—0.1
South Atlantic	10	5.69	89	—0.7	—3.1
Florida Peninsula*	8	9.92	143	+3.0	+4.5
East Gulf	9	5.63	104	+0.2	+0.1
West Gulf	7	1.52	42	—2.1	+4.2
Ohio Valley and Tennessee	11	4.29	123	+0.8	—2.6
Lower Lake	8	3.78	127	+0.8	—0.4
Upper Lake	10	3.48	117	+0.5	+1.3
North Dakota*	8	2.37	142	+0.7	+1.8
Upper Mississippi Valley	11	4.27	144	+1.3	—1.0
Missouri Valley	11	3.66	120	+0.6	+2.0
Northern Slope	7	0.90	69	—0.4	+2.7
Middle Slope	6	1.70	68	—0.8	+4.0
Southern Slope*	6	2.03	84	—0.4	+6.4
Southern Plateau*	13	0.88	56	—0.7	+5.0
Middle Plateau*	8	0.57	66	—0.3	+0.7
Northern Plateau*	12	0.18	38	—0.3	—1.4
North Pacific	7	0.79	89	—0.1	—7.8
Middle Pacific	5	T.	100	0.0	—2.6
South Pacific	4	0.00	100	0.0	+3.1

*Regular Weather Bureau and selected cooperative stations.

The precipitation was generally in excess over the eastern half of the county, except in eastern and extreme western North Carolina, South Carolina, Georgia, extreme southern Florida, southeastern Alabama, southeastern and north-central

Tennessee, and southwestern Virginia; over the western half there was a deficiency. The excess ranged from 2.0 to 5.9 inches generally over Florida, and the deficiency ranged from 2.0 to 5.0 inches on the coast of the Carolinas. Over portions of the Middle Atlantic States, eastern lower Lake region, upper Ohio Valley, east-central Tennessee, northeastern Alabama, central Oklahoma, Missouri, Minnesota, and southwestern lower Michigan the excess ranged from 2.0 to more than 4.0 inches. Over southern Louisiana and eastern Texas the deficiency ranged from 2.0 to 3.5 inches.

By geographical districts the precipitation was normal in the middle and southern Pacific districts, below normal in the slope, Plateau, and northern Pacific regions, and the western Gulf and South Atlantic States, and above normal in the remaining districts.

In Canada.—Professor Stupart says :

The rainfall was above the average in most parts of British Columbia, but only moderately so, the positive departures being about six-tenths of an inch. In the lower Lake region and in the Georgian Bay district it was likewise in many localities above the average, the positive departures being especially marked over Lake Ontario and for some distance surrounding that lake; elsewhere over the Dominion, with the exception of a marked excess at Prince Albert and vicinity, also in Cape Breton and to a small extent in the Qu'Appelle Valley, the rainfall was everywhere deficient and usually to a large amount. In Quebec, also over the Maritime Provinces, with the exception of Cape Breton, the absence of rain was attended by serious droughts causing considerable destruction of property by forest fires. In many parts of Alberta, Saskatchewan, and Manitoba, the rainfall was likewise very deficient. Under the existing conditions positive departures of 5 30 inches at Prince Albert, and of 2.68 inches at Sydney, C. B , were remarkable.

WIND.

The maximum wind velocity at each Weather Bureau station for a period of five minutes is given in Table I, which also gives the altitude of Weather Bureau anemometers above ground.

Following are the velocities of 50 miles and over per hour registered during the month:

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Lewiston, Idaho	27	62	w.	Topeka, Kans.	18	53	nw.
Minneapolis, Minn.	20	56	n.	Yankton, S. Dak.	20	61	n.
St. Paul, Minn.	4	59	n.				

CLEAR SKY AND CLOUDINESS.

Average cloudiness conditions obtained in the Ohio Valley and Tennessee, and lower Lake region. They were above the average in New England, Florida Peninsula, eastern Gulf States, upper Lake region, North Dakota, upper Mississippi Valley, and the middle Plateau and north Pacific regions. In the remaining districts they were below the average.

The distribution of clear sky is graphically shown on Chart IV, and the numerical values of average daylight cloudiness, both for individual stations and by geographic districts, appear in Table I.

The averages for the various districts, with departures from the normal, are shown in the following table:

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.5	+ 0.5	Missouri Valley	3.8	— 0.3
Middle Atlantic	5.4	— 0.6	Northern Slope	3.6	— 0.1
South Atlantic	5.0	— 0.2	Middle Slope	3.6	— 0.2
Florida Peninsula	5.9	+ 0.7	Southern Slope	2.6	— 2.2
East Gulf	6.0	+ 1.1	Southern Plateau	2.8	— 0.6
West Gulf	3.1	— 1.3	Middle Plateau	3.0	+ 0.2
Ohio Valley and Tennessee	4.5	0.0	Northern Plateau	2.7	— 0.5
Lower Lake	4.5	0.0	North Pacific	5.4	+ 1.4
Upper Lake	5.0	+ 0.2	Middle Pacific	2.2	— 0.3
North Dakota	4.3	+ 0.4	South Pacific	2.2	— 0.5
Upper Mississippi Valley	4.4	+ 0.3			

HUMIDITY.

The relative humidity was normal in New England; below in the South Atlantic States, and the Pacific, northern Plateau, and southern slope regions.

The averages by districts appear in the following table:

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
	%			%	
New England	82	0	Missouri Valley	71	+ 4
Middle Atlantic	79	+ 3	Northern Slope	55	+ 3
South Atlantic	80	— 2	Middle Slope	65	+ 6
Florida Peninsula	82	+ 2	Southern Slope	60	— 3
East Gulf	83	+ 3	Southern Plateau	47	+ 2
West Gulf	76	+ 1	Middle Plateau	40	+ 4
Ohio Valley and Tennessee	76	+ 4	Northern Plateau	36	— 7
Lower Lake	74	+ 3	North Pacific	75	— 2
Upper Lake	77	+ 2	Middle Pacific	60	— 7
North Dakota	72	+ 6	South Pacific	64	— 2
Upper Mississippi Valley	77	+ 7			

DESCRIPTION OF TABLES AND CHARTS.

By Mr. WM. B. STOCKMAN, Chief, Division of Meteorological Records.

For description of tables and charts see page 20 of REVIEW for January, 1905.